Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims:

1. (currently amended) A method comprising:

determining a concentration of a suppressor for a high-acid electroplating solution such that the suppressor concentration is sufficient to substantially reduce a plurality of electroplating defects; and

determining a concentration of a chloride for the high-acid electroplating solution such that the chloride concentration is sufficient to catalyze the suppressor and to provide gap fill of substrate features having an aspect ratio of 8 or more;

determining a concentration of a leveler for the high-acid electroplating solution, the concentration of leveler determined to reduce within die thickness variation to a specified value; and

determining a concentration of an accelerator for the high-acid electroplating solution based upon the chloride concentration and the leveler concentration.

- 2. (original) The method of claim 1 wherein the plurality of electroplating defects include protrusion defects, bare test wafer defects, and pit defects.
- 3. (previously presented) The method of claim 2 wherein the concentration of suppressor is in the range of 3.3 ml/l 20 ml/l of the high-acid electroplating solution.
- 4. (previously presented) The method of claim 3 wherein the concentration of suppressor is approximately 20 ml/l of the high-acid electroplating solution.
- 5. (previously presented) The method of claim 1 wherein the chloride level is in the range of 30 mg/l 65 mg/l of the high-acid electroplating solution.
- 6. (canceled)

- 7. (currently amended) The method of claim $6 \underline{1}$ wherein the leveler concentration is in the range of 8ml/l 12ml/l of the high-acid electroplating solution..
- 8. (canceled)
- 9. (currently amended) The method of claim 8 1 wherein the accelerator concentration is in the range of 1.5 ml/l 3.3ml/l for a chloride concentration greater than 30 mg/l or a leveler concentration greater than 4 ml/l of the high-acid electroplating solution..
- 10. (cancelled)
- 11. (cancelled)